

Selecting an Aquarea system

Room Sizing

Selecting equipment for the room can be done by computer modelling, rule of thumb or, for retrofit, by comparison with existing radiators
Heat pump systems use significantly lower water temperatures than conventional boiler systems making conventional radiators inadvisable
The use of low temperature water lends itself to fan coils, low temperature radiators or under floor heating
We recommend Jaga low temperature radiators. A price list for these is enclosed.

Computer Modelling

Please contact us or use your own selection software



Rule of Thumb - Heating Only

For budgeting for average domestic applications you can use the following figures for Watts per square metre
These figures allow for a 3m ceiling height, room temperature of 20C and outdoor temperature of -3C

Application	W/m2
Old house without insulation	140
Old house with insulation	104
House built after 1990	76
House built after 2005	55

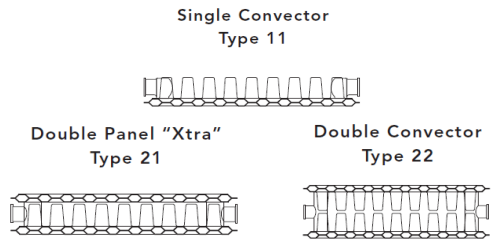


Confirm selection by computer before ordering!

Comparison with existing radiators

Based upon Myson Select Standard convector and dual convector radiators
Outputs are Watts per metre length using water at 70/60C and air at 20C

Radiator Height	Type 11	Type 21	Type 22
300mm	525	797	1005
400mm	750	1109	1410
500mm	830	1209	1546
600mm	969	1400	1799
700mm	1100	1583	2043



Use the figures above to select a suitable comparison low temperature radiator or underfloor heating

Hot Water tank selection

It is normal to allow at least 50 litres of hot water storage per person
We generally recommend using a 200l cylinder for a typical family home or 300l for a large house
The system will switch between heating and hot water production with the user selecting which takes priority



Aquarea selection

The selection of the Aquarea should be based upon the sum of the total room heat loads
Choose a split system to avoid the need for using anti freeze or replacing an existing boiler
Choose a monobloc to avoid the need for indoor space and on site refrigeration pipe



Additional checks

The minimum system water quantity is 30 litres. Below this a buffer tank, extra or oversized pipe should be considered to meet this minimum
The maximum water volume is 200 litres - above this an additional expansion vessel should be used
The maximum water circuit height separation is 7m. Above this an additional expansion vessel should be used
An automatic air vent should be fitted at the highest point
A double check valve should be fitted before the filling loop
A strainer should be fitted in the return pipe with shut off valves each side
Pay attention to system resistance and check whether a boost pump is necessary
If using additional heat sources always use a thermal storage tank
For microbore systems always consider a thermal store and boost pump
For Heating and Cooling systems ensure all water surfaces are insulated or bypassed in cooling mode. Check all valves are suitable.



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